Vidifox® Document Camera

DV 485

USER GUIDE

Please read this manual carefully before operating the camera and keep it for your reference.

PLEASE READ CAREFULLY BEFORE USE

- Please be aware of the required power supply environment is 100-240V, 50/60Hz, 2A Max.
- Do not place the equipment under sunlight, near heaters, near water, or on any unstable surface.
- Keep the equipment away from acid or alkali gas.
- The recommended operating environment is:
    Temperature: 0ºC--45ºC(32ºF-113ºF)
    Humidity: less than 75%
- Always unplug BEFORE cleaning the equipment. Do not use volatile solvent when cleaning.
- Unplug the power cable if camera is not in use for a long period.
- Consult the dealer for professional assistance when there is any problem with the equipment.
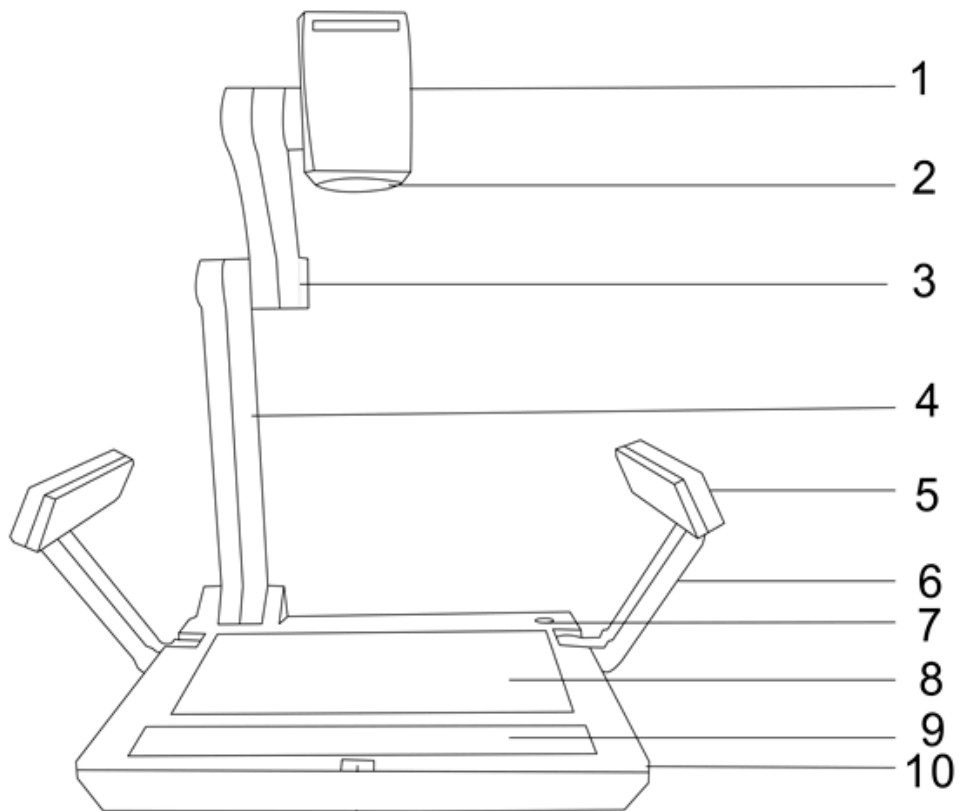
CONTENTS

1. PARTS AND FUNCTIONS

(1) camera head	(2)camera lens	(3) upper mechanical arm
(4) main mechanical arm	(5) side lamp	(6) lighting arm
(7) power switch	(8)base light	(9) control panel
(10) base unit		

2.INPUTS AND OUTPUTS
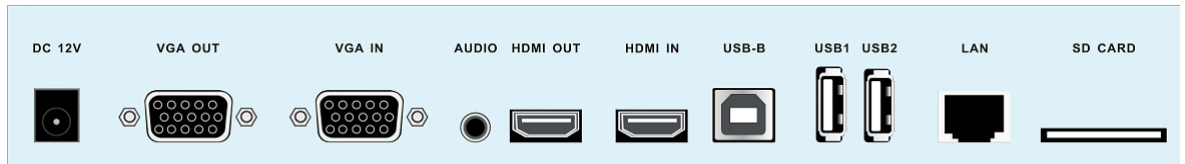

1.**DC 12V:** Power input

2.**VGA OUT**：VGA Output

3.**VGA IN:** VGA Input

4.**AUDIO:** Audio Output

5.**HDMI OUT:** HDMI output

6.**HDMI IN:** HDMI input

7.**USB-B:** USB slave, for connecting with PC

     Firmware upgrading.

8.**USB1/USB2:** USB host, for connecting with USB mouse or USB memory stick.

9.**LAN:** Network connection

10.**SD CARD:** SD card slot.

Note: VGA signal and HDMI signal can not be outputted at the same time, please switch needed output signal type.

Note: Visualizer is based on HDMI 1.3,display device based on HDMI 1.3 and above is recommended. There may cause compatibility problems when working with display device below HDMI 1.3.

3.Control Panel
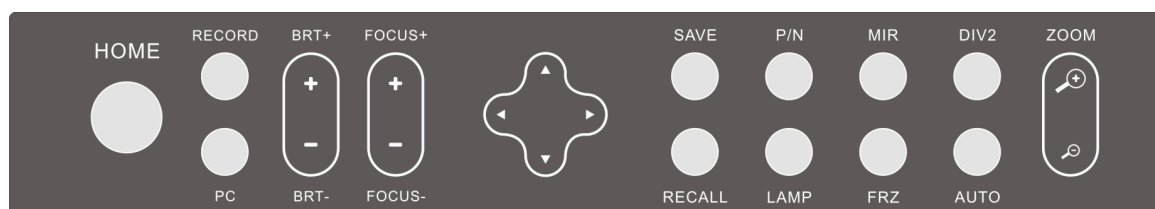
1.**HOME**：a. Switch back to the camera signal.

b. Display the selected image and video clips in image recall mode.

2.**RECORD**：Start/stop video recording, the video clip recorded will be automatically saved to a USB memory stick, SD card, or built-in memory. DV 485 can detect an external storage media and put the last detected storage as a priority storage site.   If there is no external storage detected, all video clips will be saved in the built-in memory.

3.**PC**：Switch to the PC signal.

4.**BRT+, BRT－**：Control the brightness of displaying image.

5.**FOCUS+, FOCUS－**：Adjust focus manually, focus far and focus near.

6.**ARROWS**：Select images and video clips in image recall mode.

7.**SAVE:** Capture and save the images to USB memory stick, SD card, or built-in memory. DV 485 can detect an external storage media and put the last detected storage as a priority storage site. If there is no external storage detected, all video clips will be saved in the built-in memory.

8.**RECALL**：Enable image recall mode, displaying the saved images and video clips.

9.**P/N**：Switch the image display between positive and negative.

10.**LAMP**：Toggle arm light, back light and no light.

11.**MIR**：Flip the current displaying image.

12.**FRZ**：Freeze the displaying image .

13.**DIV2**：Split the displaying image.

14.**AUTO**：Adjust white balance and focus automatically.

15.**ZOOM+, ZOOM－**： Zoom in and zoom out the current displaying image.

4.ANNOTATION

The annotation function will be activated by connecting a USB mouse to the document camera. We will see the following icons by clicking the left button on a mouse:

1. ：Clicking this icon, the whiteboard function is activated. The image captured is now subjected to annotation. To switch back to the real-time camera mode, click icon .

2. ：Clicking this icon, the current image will be saved and annotation function activated. In annotation mode, click the following icons to choose the color of annotating pen.

   Yellow, Red, Blue.

3. ：In annotation mode, click this icon to delete annotation, there are two types of deletion:

   : area clear : all clear.

4. ：In annotation mode, click this icon to choose the thickness of the pen, there are 3 options: Thin, Medium, Thick.

5. ：Click to capture and save the image.

6. REC ：Click to start recording, click again to stop recording and save the video clip.

7. ：Click to recall the saved images or video clips, meanwhile the annotation function is activated, click again back to camera image. Press and hold left key on mouse for at least three seconds to delete this image.

8. ：Click to rotate the image(90°,180°,270°)

9. ：Click to go to control menu.

   ：Image zoom in and zoom out control

   ：Image brightness control

   ：Adjust focus manually

   ：Perform white balance and focus automatically

: Toggle arm light, back light and no light.

: Output the mirror image

: Switch the image mode between positive and negative.

: Image freeze

: Image split.

: Title freeze.

In Title freeze mode, there are 4 buttons used to adjust the title function:

: Enlarge the frozen title area

: Reduce the frozen title area

: Adjust the frozen title position.

: Picture in picture

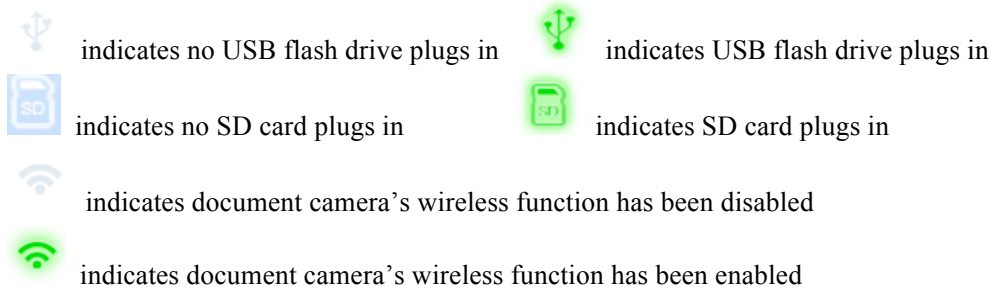: Click to go to start page of the embedded multimedia system.

5.MULTIMEDIA SYSTEM

Under the main system interface user can find tips column and function column.

1. Tips column

indicates no USB flash drive plugs in   indicates USB flash drive plugs in

indicates no SD card plugs in   indicates SD card plugs in

indicates document camera's wireless function has been disabled

indicates document camera's wireless function has been enabled

2. Function column

Visualizer：Go to real-time camera image.

Files ：Open the files saved in SD card or memory stick that connected to the document

camera(see the screen shot below)

	Type	Name	Size	Time
hill.txt			1.2M	2012/11/12
Logo. txt			5.2M	2012/11/12
LOST.DIR			5.2M	2012/11/12
Music				2012/11/23
WaninExplorer			5.2M	2012/10/08

SD卡

USB

Internet ：Browse the webpage

Settings ：System settings

Settings

1. Device

Name :Define the SSID of the document camera.

Factory Mode: Enter to adjust the parameters of document camera. Please contact the dealer

for professional assistance.

2. Resolution

Select the suitable output resolution of the document camera.

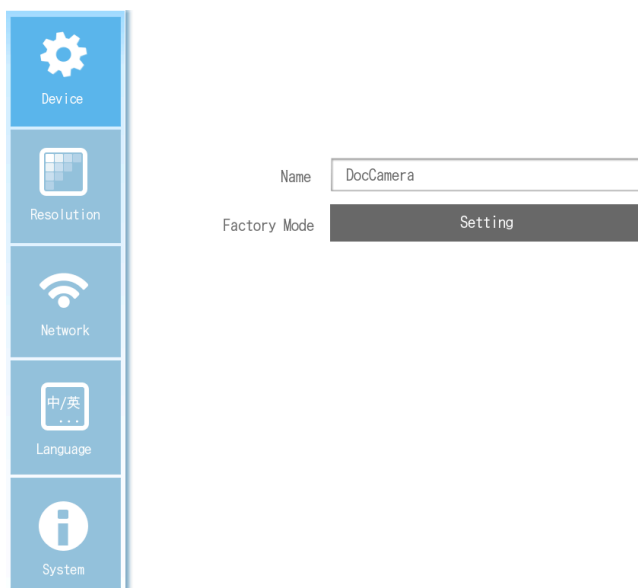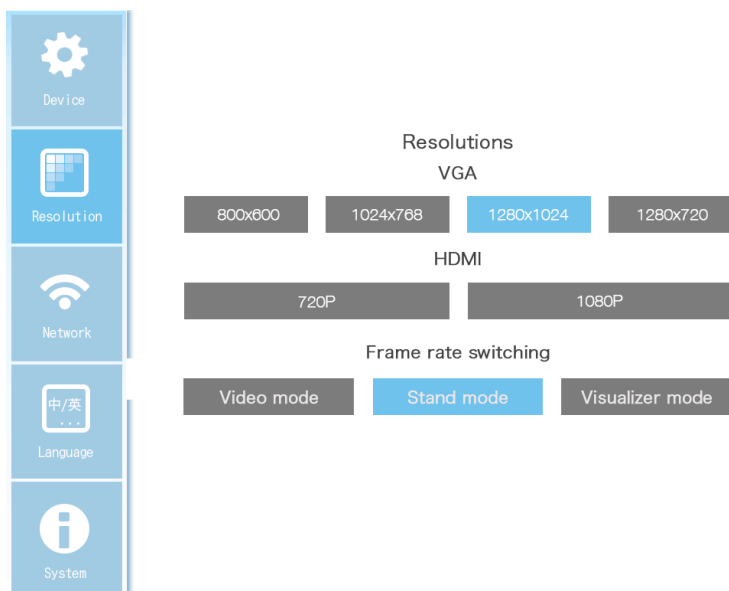Note: Document camera will be restarted after switches resolution.

Frame rate switching:

        Video mode: Frame rate: 30fps

        Stand mode: Frame rate: 22fps

      Visualizer mode: Frame rate: 12fps

3. Network
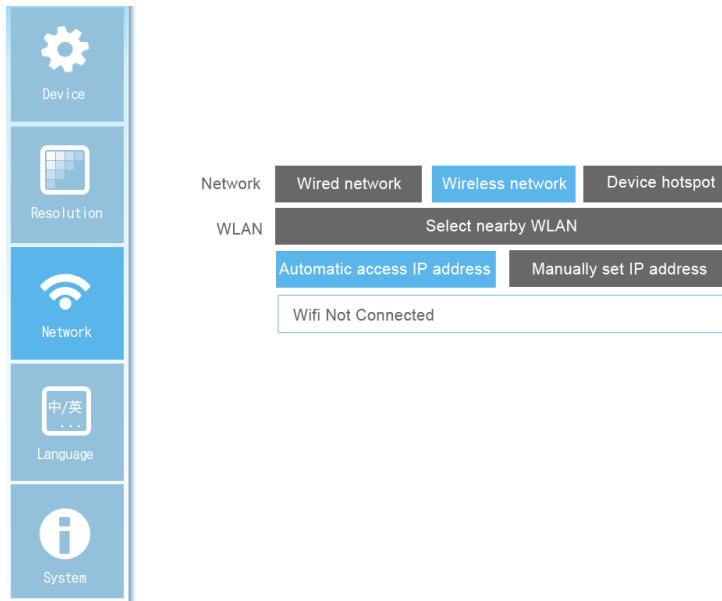
Network:

      Wired network: Select to connect to a router with cable via LAN.

      Wireless network: Select to connect to an external Wi-Fi network.

      Device hotspot: Select to connect to the embedded Wi-Fi network.

WLAN：Click to view and select the available external Wi-Fi networks.(see below)
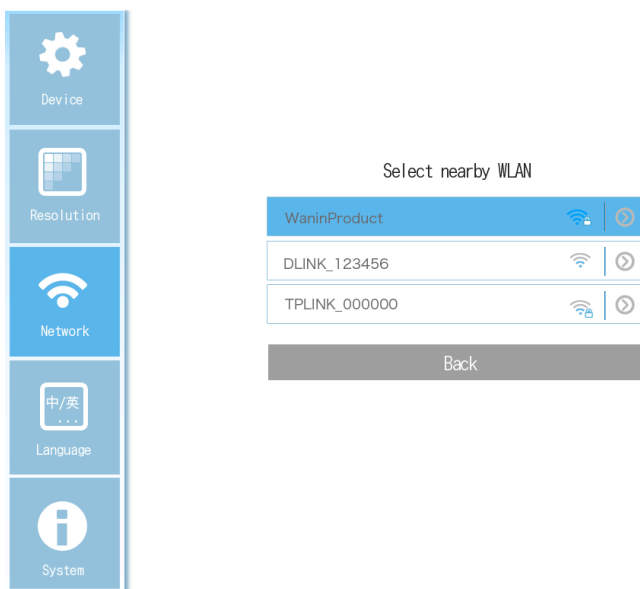
IP: Select to configure the IP address automatically or manually.

4. Language
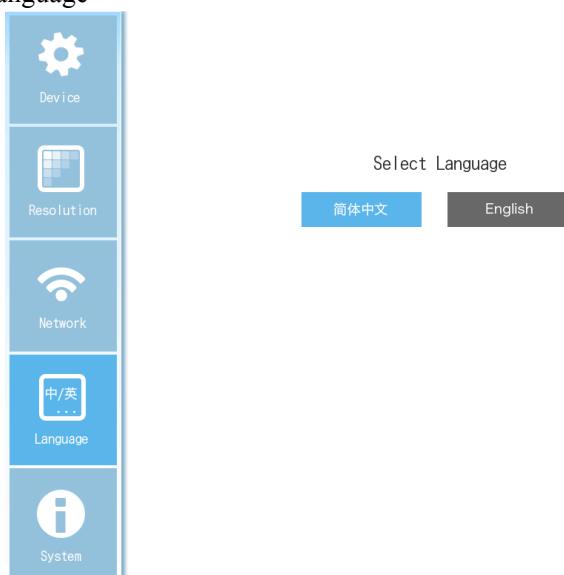
Switch the system language between simplified Chinese and English.

5. System

Please try restarting the device or restoring factory settings if there is a problem with the system.

Click "firmware upgrade" to start upgrading system firmware.

Note: There is risk involved in upgrading the firmware ,please upgrade under the guidance of professionals.

6.SOFTWARE

Software Installation

There are 3 types of software in CD for different operation systems, here we take the software of

Windows system for example.

Double click in CD to install the software to your PC, there will be

a generated icon on the desktop.

Connection

Option 1
Select "Wired network" in network setting of the document camera.
Select "IP automated acquisition" in network setting of the PC.
Connect the document camera and PC with a network cable,
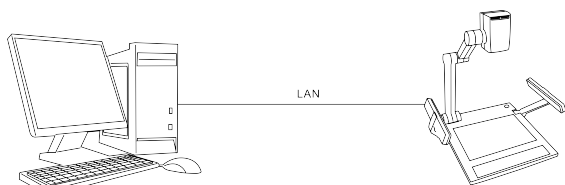
Option 2
Select "Device hotspot" in network setting of the document camera.
Connect the PC to the Wi-Fi signal of the document camera.

Option 3
Select "Wired network" or" Wireless network" in networking setting of the document camera.
Connect the document camera to a router with LAN or Wi-Fi.
Connect the PC to the same router with LAN or Wi-Fi.
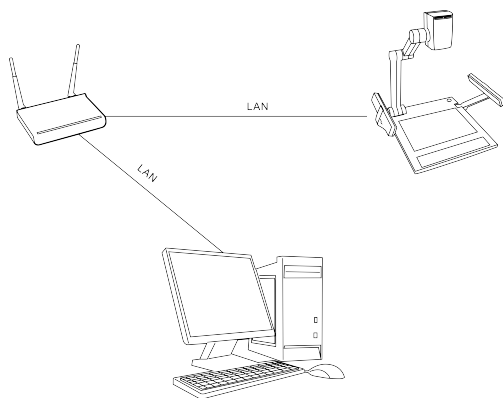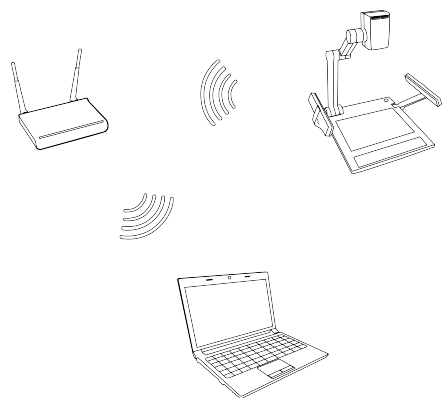
Wired network   Wireless network

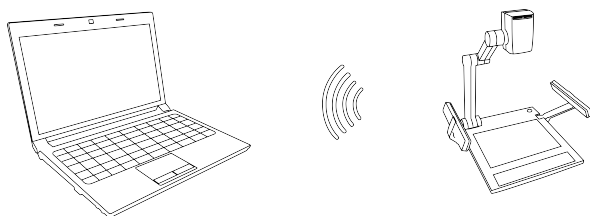## Software Start

Note: Please go back to Visualizer mode before start the software.

Double click the icon [SynControl icon] on the desktop.
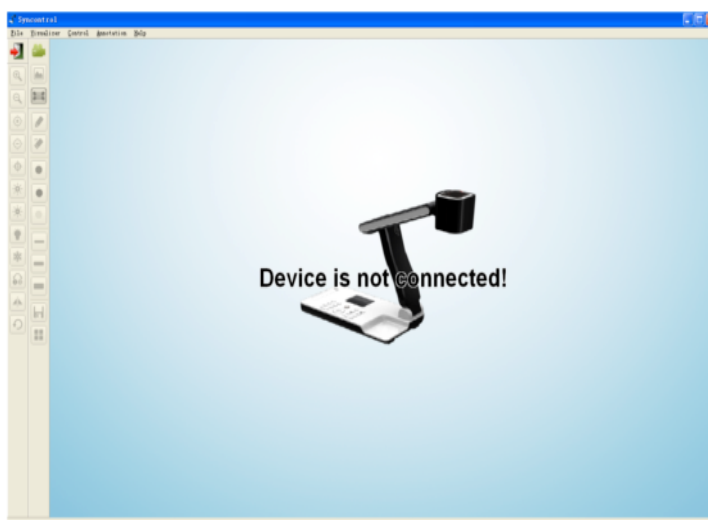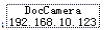
Left click [icon] on the left tool bar , or choose the "select" of "visualizer" in the menu bar.
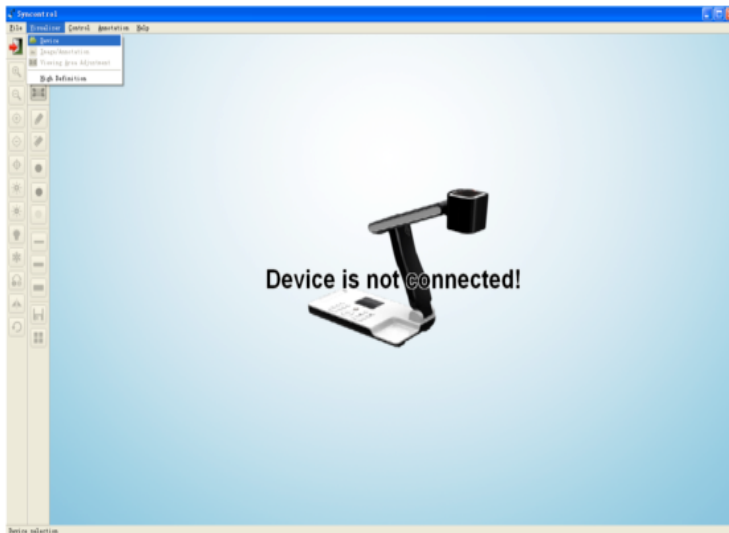
There will be a window lists all connected devices.
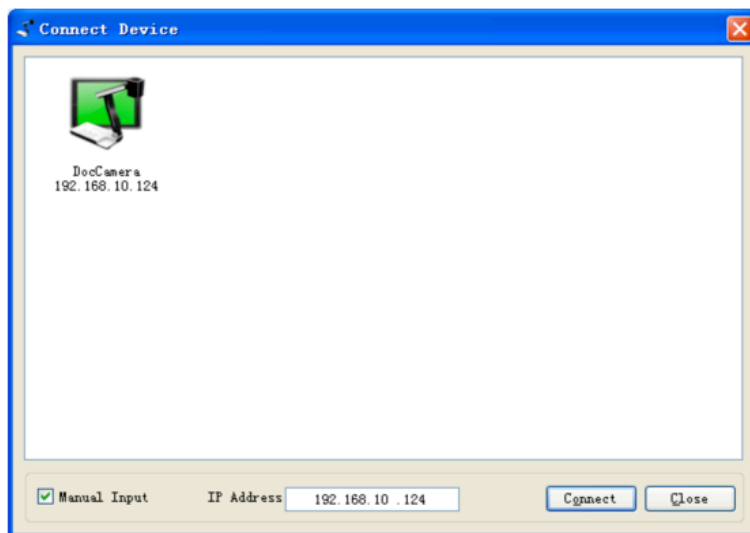
Double click the DocCamera icon to activate it, then the image from this camera will be displayed.
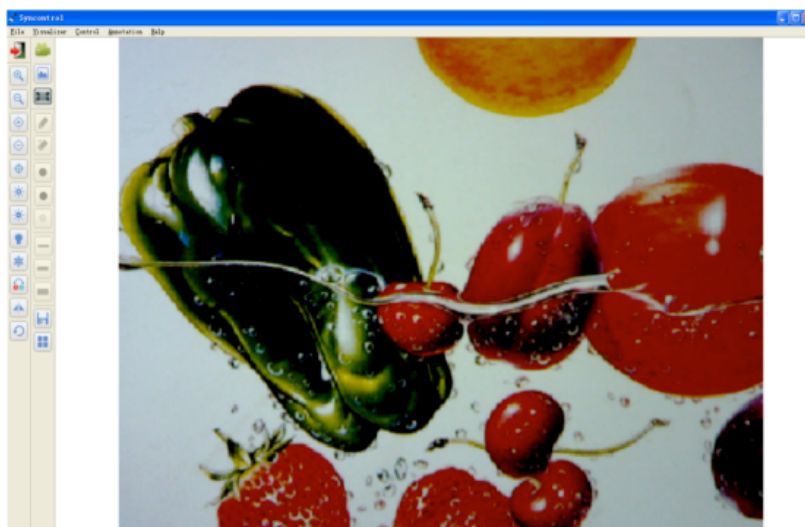
We also can choose to connect a device manually.

1) Tick the ☑ Manual Input

2) Input the IP address of the device need to be selected IP Address `192.168.10 .124` .

3) Click Connect to activate.

Please refer to the help for detailed information.

7.SPECIFICATIONS

Model No.	DV 485
Sensor	1/3" CMOS
Zoom	9x optical, 20x digital
Frame rate	30
Shooting area	Max: 13.5"x10.6", Min: 0.1"x0.1"
Focus	Auto/manual
Native output signal	SXGA(1280x1024@60Hz)
Converted output signal	XGA,720P, 1080P
Resolution (Horizontal)	≥ 750 TV lines
White balance	Auto/manual
Brightness adjustment	Yes
image capture	Yes, on-board 400 images
Video recording	Yes
Image mirror	Yes
Image rotation	90/180/270
Image split	Yes
Picture in picture	Yes
Positive/negative conversion	Yes
Image freeze	Yes
OSD	Chinese/English
Inputs	VGA×1,HDMI×1
Outputs	HDMI×1,VGA×1,Audio×1
USB2.0	Host×2, Slave×1
Software	Windows XP /7 or above, Mac
LAN	x1
SD card slot	x1
Light source	Arm light×2, A4 size lightbox(LED)
Dimensions	Folded: 15.9"x16.7"x6.1" Setup: 18.7"x16.7"x22.3"
Power supply	12V DC power adapter
Weight(net)	4.5Kg

8.SETTING UP

1. Remove all the packing

    materials. Unfold the light

    arms to the end position.

2. Raise the camera arm completely.

3. Rotate the camera head until the

    lens face the center of the base unit.

4. Connect the VGA OUTPUT of

    the document camera to the

    VGA(RGB) INPUT of the display

    (monitor, television or projector) with

    the provided VGA cable.

5. Connect the HDMI OUTPUT

    of the document camera to the

    HDMI INPUT of the display

    (monitor, television or projector) with

    the provided HDMI cable.

6. Get the document camera connected with

    the power supply with the provided power

    adaptor and cord.
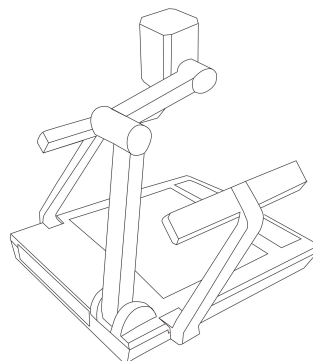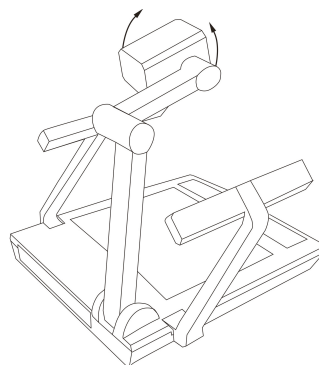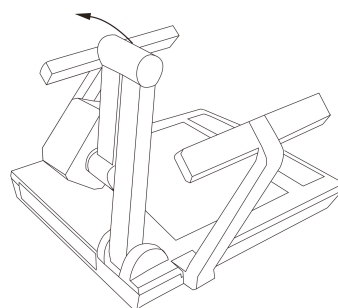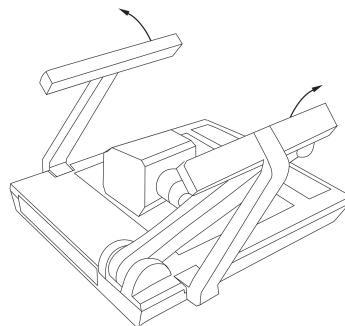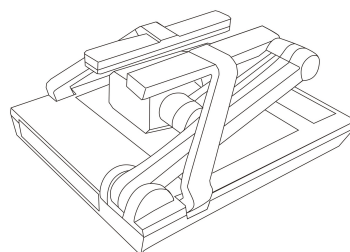
9.OPERATION PROCEDURES

1. General:

    1).   Turn on the power switch.

    2).   Place the target object on the base unit surface.

    3).   Adjust the image size according to the object size by pressing the ZOOM+, ZOOM－ buttons on the control panel.

    4).   Press the AF button for automatic focus and white balance.

    5)   Press Save/Record to capture and save the image/video clip to memory.

    6).   FRZ button can be used to lock the image while changing displaying materials.

    7)   DIV2 button can be used to compare the camera live image with a saved image in memory side by side.

2. Display the PC signal:

    Connect the VGA IN of the document camera to the PC OUTPUT with the provided VGA cable, then press PC to display the PC signal.

3. Showing the 3D objects:

    Use the FOCUS+, FOCUS－ buttons on the front panel to adjust the focus on any part of the 3D object.

4. Showing the transparent material such as an overhead transparent sheet:

    Press the LAMP button to turn on the built-in base light, then press P/N, switch to negative mode.

5. By-pass function

    When turn off the power switch, the PC signal can pass through the document camera via VGA in and VGA out.

    Note: Please disconnect the power cable if document camera will not be used for a long period.

10.TROUBLE-SHOOTING

Symptoms	Possible causes/counter-measures
No image	1. Check the power cord and adaptor. 2. Check the VGA/HDMI cables that connect the document camera and display device 3. Check the power switch.
Can not get PC signal	1. Check the VGA/HDMI cables that connect the document camera and PC. 2. Press PC to switch to PC signal.
Image bending	1. Camera is not in right position, adjust the camera. 2. Press the "Auto adjust" of the LCD.
Out of focus or blurring image	1. The object is too close to the lens. 2. Focus is on the top point of zoom press ZOOM-. 3. Auto-focus is not on: press AF again. 4. There is mist on the lens. It will disappear gradually when the equipment warms up.

If the problem still remains after checking the above, consult your dealer or authorized service for help.

11.PACKING LIST AND ACCESSORIES

Items	Quantity
Power cord & adaptor	1
VGA Cable	1
HDMI Cable	1
USB Cable	1
CD(Software and user manual)	1